

## CLAIMS

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent is:

1           1. Method for a software provider (25) of enabling a software-acquiring entity  
2           (20) to arrive from an existent first signed piece of code (11) at a second signed piece of  
3           code (12, 13), both pieces of code (11, 12, 13) having been generated by use of a first  
4           software archive generator (2) under use of generation instructions (8), comprising the  
5           step of providing to said software-acquiring entity (20) a difference code (4, 5)  
6           comprising the steps necessary to arrive from said first signed piece of code (11) at said  
7           second signed piece of code (12, 13), which difference code (4, 5) is usable at said  
8           software-acquiring entity (20) to be combined with said first signed piece of code (11)  
9           by a second software archive generator (7) to generate said second signed piece of code  
10          (12, 13), whereby said second software archive generator (7) is to be fed with those  
11          generation instructions (8) that were used by said first software archive generator (2) for  
12          the generation of both pieces of code (11, 12, 13).

1           2. Method according to claim 1, wherein the generation instructions (8) are  
2           provided to the software-acquiring entity (20) by the software provider (25), preferably  
3           together with the second software archive generator (7).

1           3. Method according to claim 1, wherein the pieces of code (11, 12, 13) are  
2           signed using a private key (14).

1           4. Method according to claims 1, wherein the signed pieces of code (11, 12, 13) are  
2           stored in a storage unit (1) at the software provider (25).

1           5. Method according to claims 1, wherein the difference code (4, 5) is created,  
2 preferably by the first software archive generator (2), while said first software archive  
3 generator (2) generates the second signed piece of code (12, 13).

1           6. Method according to claims 1, wherein for more than two pieces of code (11,  
2 12, 3) being stored, the difference code (4, 5) is generated only between a subset of said  
3 pieces of code (11, 12, 13).

1           7. Method according to claim 6, wherein for arriving from the first piece of code  
2 (11) to the second piece of code (13) several difference codes (4, 5) are required, these  
3 difference codes (4, 5) are merged to a single difference code to be provided to the  
4 software-acquiring entity (20).

1           8. Method according to claims 1, wherein the first and second piece of code (11,  
2 12, 13) are identified at the software provider (25) by deriving a corresponding  
3 identifier from a request (16) received from the software-acquiring entity (20).

1           9. Method for a software-acquiring entity (20) of arriving from an existent first  
2 signed piece of code (11) at a second signed piece of code (12, 13), both pieces of code  
3 (11, 12, 13) having been generated at a software provider (25) by use of a first software  
4 archive generator (2) under use of generation instructions (8), comprising the steps of

- 5           - sending a code amendment request (16) to said software provider (25) for the  
6           delivery of a difference code (4, 5) which comprises the steps necessary to arrive  
7           from said first signed piece of code (11) at said second signed piece of code (12,  
8           13),
- 9           - receiving said difference code (4, 5),

10 - combining said difference code (4, 5) with said first signed piece of code (11) by  
11 use of a second software archive generator (7), thereby generating said second  
12 signed piece of code (12, 13), whereby said second software archive generator  
13 (7) is fed with those generation instructions (8) that were used by said first  
14 software archive generator (2) for the generation of both pieces of code (11, 12,  
15 13).

1 10. Method according to claim 9, wherein the generation instructions (8) are  
2 received from the software provider (25), preferably together with the second software  
3 archive generator(7).

1 11. Method according to claim 9, wherein the pieces of code (11, 12, 13) are  
2 signed by use of a private key (14) and the signature (Sig 11, Sig 12, Sig 13) is  
3 verifiable by use of a corresponding public key (15).

1 12. Method according to claims 9, wherein the first and second piece of code  
2 (11, 12, 13) are identified by the software-acquiring entity (20) by giving a  
3 corresponding identifier in the code amendment request (16).

1 13. Computer program product comprising program code means for performing  
2 a method according to claim 1.

1 14. Computer program product according to claim 12, comprising the program  
2 code means stored on a computer-readable medium.

1           15. Code amendment enabler enabling a software-acquiring entity (20) to arrive  
 2 from an existent first signed piece of code (11) at a second signed piece of code (12,  
 3 13), both pieces of code (11, 12, 13) having been generated by use of a first software  
 4 archive generator (2) under use of generation instructions (8), comprising

- 5           - a difference code generator (10) for generating a difference code (4, 5) that
- 6           comprises the steps necessary to arrive from said first signed piece of code (11)
- 7           at said second signed piece of code (12, 13), which difference code (4, 5) is
- 8           usable at said software-acquiring entity (20) to be combined with said first
- 9           signed piece of code (11) by a second software archive generator (7) to generate
- 10          said second signed piece of code (12, 13), whereby said second software archive
- 11          generator (7) is fed with the generation instructions (8),
- 12          - an output unit (3) for providing to said software-acquiring entity (20) said
- 13          difference code (4, 5).

1           16. Code amendment enabler according to claim 15, further comprising an input  
 2 unit (24) for receiving from said software-acquiring entity (20) a code amendment  
 3 request (16) for the delivery of said difference code (4, 5).

1           17. Code amendment enabler according to claim 15, further comprising a first  
 2 software archive generator (2) for generating said pieces of code (11, 12, 13) under use  
 3 of generation instructions (8).

1           18. Code amendment device for arriving from an existent first signed piece of  
 2 code (11) at a second signed piece of code (12, 13), both pieces of code (11, 12, 13)  
 3 having been generated at a software provider (25) by use of a first software archive  
 4 generator (2) under use of generation instructions (8), comprising

5        - a second software archive generator (7) for combining a received difference code  
6        (4, 5) with said first signed piece of code (11), thereby generating said second  
7        signed piece of code (12, 13), whereby said second software archive generator  
8        (7) is to be fed with those generation instructions (8) that were used by said first  
9        software archive generator (2) for the generation of both pieces of code (11, 12,  
10       13)

1        19. Code amendment device according to claim 18, further comprising an  
2        input/output unit (6) for sending a code amendment request (16) to said software  
3        provider (25) and for receiving said difference code (4, 5).

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